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Amendments to the Claims

This listing of claims will replace all prior versions of claims in the application.

Listing of Claims:

1. (*currently amended*): Energetic material of low vapor pressure comprising, ionic liquids having fuel cations and oxidizer anions, wherein said cations and anions are substantially oxygen balanced.

2. (*cancelled*).

3. (*original*): The material of claim 1 wherein said ionic liquid has cations and anions that define a single type of ionic compound or a plurality of types of ionic compounds.

4. (*original*): The material of claim 1 wherein said cations are asymmetric.

5. (*original*): The material of claim 1 wherein said anions carry sufficient oxidants to achieve complete or near complete combustion of said cations.

6. (*original*): The energetic material of claim 1 wherein said ionic liquids are selected from the group consisting of N-alkyl substituted pyridinium or

N-alkyl substituted imidazolium cations paired with nitrate, perchlorate, or nitramide based anions.

7. (*currently amended*): The energetic material of claim 6 wherein said N-alkyl substituents contain energetic groups ~~consisting of~~ comprising azido- or nitro- groups.

8. (*original*): The energetic material of claim 6 wherein said cation is the 1-N-(2,2-dinitroethyl), 3-N-azidomethyl, 1,3-imidazolium cation.

9. (*original*): The energetic material of claim 6 wherein said cation is the 1-N-(2-trinitroethyl), 3-N-azidomethyl, 1,3-imidazolium cation and said anion is ClO_4^- , $\text{N}(\text{NO}_2)_2^-$, NO_3^- , or $\text{C}(\text{NO}_2)_3^-$.

10. (*original*): The energetic material of claim 6 wherein said cation is the 1-N-(2-trinitroethyl), pyridinium cation and said anion is ClO_4^- , $\text{N}(\text{NO}_2)_2^-$, NO_3^- , or $\text{C}(\text{NO}_2)_3^-$.

11. (*original*): The energetic material of claim 6 wherein said cations are $\text{C}_8\text{H}_{15}\text{N}_2$, $\text{C}_9\text{H}_{14}\text{N}$ or $\text{C}_6\text{H}_{11}\text{N}_2$.

12. (*original*): The energetic material of claim 6 wherein said anions and cations carry sufficient oxygen to achieve an $\text{H}_2\text{O}/\text{CO}/\text{CO}_2$ balance during self-combustion.

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13. (*original*): The energetic material of claim 6 wherein said anions are selected from the group consisting of ClO_4^- , NO_3^- , $\text{N}(\text{NO}_2)_2^-$, $\text{C}(\text{NO}_2)_3^-$, $\text{B}(\text{ONO}_2)_4^-$, $\text{Al}(\text{ONO}_2)_4^-$, $\text{Al}(\text{ONO}_2)_5^{-2}$, $\text{Al}(\text{ONO}_2)_6^{-3}$, $\text{P}(\text{ONO}_2)_6^-$, $\text{Ti}(\text{ONO}_2)_5^-$, $\text{Ti}(\text{ONO}_2)_6^{-2}$, $\text{B}(\text{OCIO}_3)_4^-$, $\text{Al}(\text{OCIO}_3)_4^-$, $\text{Al}(\text{OCIO}_3)_5^{-2}$, $\text{Al}(\text{OCIO}_3)_6^{-3}$, $\text{Ti}(\text{OCIO}_3)_5^-$, $\text{Ti}(\text{OCIO}_3)_6^{-2}$, and $\text{P}(\text{OCIO}_3)_6^-$.

14. (*original*): The energetic material of claim 6 comprising pairing a cation of 1-N,3-N-dialkylsubstituted imidazolium rings or 1-N-alkylsubstituted pyridinium rings with an anion of claim 9 to form an ionic liquid.

15. (*original*): The energetic materials of claim 11 wherein said ionic liquids are selected from the group consisting of $[\text{C}_6\text{H}_{11}\text{N}_2^+][\text{B}(\text{ONO}_2)_4^-]$, $[\text{C}_6\text{H}_{11}\text{N}_2^+][\text{P}(\text{ONO}_2)_6^-]$, $[\text{C}_8\text{H}_{15}\text{N}_2^+][\text{B}(\text{OCIO}_3)_4^-]$, $[\text{C}_9\text{H}_{14}\text{N}^+][\text{Al}(\text{OCIO}_3)_4^-]$ and $[\text{C}_6\text{H}_{11}\text{N}_2^+][\text{Ti}(\text{ONO}_2)_5^-]$.

16. (*original*): A method of preparing an energetic ionic liquid comprising reacting: $\text{BCl}_3 + [\text{C}_6\text{H}_{11}\text{N}_2^+][\text{Cl}^-] + x\text{S N}_2\text{O}_4 \rightarrow [\text{C}_6\text{H}_{11}\text{N}_2^+][\text{B}(\text{ONO}_2)_4^-] + 4\text{NOCl}$.

17. (*original*): The ionic liquids of claim 1 employed in monopropellants, explosives, munitions or plasticizers.

18. (*original*): The ionic liquids of claim 1 employed in oxidation reactions and for synthesizing azo, nitro, nitrate, azoxy and nitroazoxy compounds.

19. (*previously presented*): The energetic material of claim 8 wherein said anion is ClO_4^- .

20. (*withdrawn*): The energetic material of claim 8 wherein said anion is $\text{N}(\text{NO}_2)_2^-$.

21. (*cancelled*)